



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,892	11/30/2001	Robert R. Keller JR.	72312	4224
22242 7590 01/08/2007 FITCH EVEN TABIN AND FLANNERY 120 SOUTH LA SALLE STREET SUITE 1600 CHICAGO, IL 60603-3406			EXAMINER SMITH, TYRONE W	
			ART UNIT 2837	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/997,892

Applicant(s)

KELLER, ROBERT R.

Examiner

Tyrone W. Smith

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-42 rejected under 35 U.S.C. 103(a) as being unpatentable over Miura (5994858) in view of Bernard et al (6799140).

Regarding Claims 1, 11, 12, 23, 24, 30, 32, 37, 38, and 40. Miura discloses a method and apparatus for detecting obstruction to powered window movement, which includes initiating a learning mode/user switch (switching device - Figure 1 item 1), operating a motor (control operation unit and motor drive unit - Figure 1 items) 9 and 3), measuring at least one parameter that corresponds to the operation of the motor to provide a parameter value (pulse generator - Figure 1 item 5), using the parameter value to establish a specific force control value to establish obstacle detection or reversing operation or stoppage or other types of operation. Further, assigning specific force control value to a specific location of the set memory unit (refer to Figure 1 items) 5, 9 and 10, column 18 lines 37 - 67 and column 19 lines 1 - 4).

However, Miura does not disclose using a physical setting range for the force control by using a measured parameter.

Bernard discloses using a user manipulability/program module (Figure 1 item 3Q', column 1 lines 65-67 and column 2 lines 1-10) setting range for the force control (column 1 lines 65-67 and column 2 lines 1-10) from measuring at least one parameter and using the parameter

value to establish specific force control values (column 3 lines 7-67 and column 4 lines 1-63).

Note that the detector can be set to a working mode or learning mode.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Miura invention of detecting obstruction to powered window movement with Bernard's detector for monitoring rotation. The advantage of combining the two would provide a system for accurately detecting obstructions in a movable barrier in operation through the use of a parameter and force control.

Regarding Claims 2, 20 - 22, 33. Miura measures at least one parameter that corresponds to the operation of the motor to provide a parameter value, uses the parameter value to establish a specific force control value to establish obstacle detection or reversing operation or stoppage or other types of operation and assigns a specific force control value to a specific location of the set memory unit (column 18 lines 37 - 67 and column 19 lines 1 - 4). Bernard discloses using a user manipulability/program module (Figure 1 item 30*, column 1 lines 65-67 and column 2 lines 1-10) setting range for the force control (column 1 lines 65-67 and column 2 lines 1-10) from measuring at least one parameter and using the parameter value to establish specific force control values (column 3 lines 7-67 and column 4 lines 1-63). Note that the detector can be set to a working mode or learning mode.

Regarding Claims 3 - 6, 25 - 29 and 34 - 36. Bernard discloses using a user manipulability/program module (Figure 1 item 30, column 1 lines 65-67 and column 2 lines 1-10) setting range for the force control (column 1 lines 65-67 and column 2 lines 1-10) from measuring at least one parameter and using the parameter value to establish specific force control values (column 3 lines 7-67 and column 4 lines 1-63).

Regarding Claims 7 - 8 and 31. Miura describes disabling and enabling at least some barrier controller function until the learning mode has been initiated or concluded (Miura (column 7 lines 36 - 42 and column 9 lines 11 - 58).

Regarding Claims 9 - 10 and 39. Miura and Bernard describe a user manipulability learning mode switch (Miura - Figure 1 item 1 and Bernard - Figure 1).

Regarding Claims 13- 16 and 18 - 19. Miura measures at least one parameter (speed) that corresponds to the operation of the motor, using a pulse generator, to provide a parameter value (Figure 4, column 7 lines 22 - 35 and column 18 lines 37 - 67).

Regarding Claims 23 and 24. Bernard discloses using a user manipulability/program module (Figure 1 item 30, column 1 lines 65-67 and column 2 lines 1-10) setting range for the force control (column 1 lines 65-67 and column 2 lines 1-10) from measuring at least one parameter and using the parameter value to establish specific force control values (column 3 lines 7-67 and column 4 lines 1-63).

Regarding Claim 17. Bernard discloses a visual signal/motion detector (Figure 1 item 31 to indicate initiation of the learning mode/control unit (Figure 1 item 30).

Regarding Claims 41 - 42. Miura discloses a pulse edge counter (Figure 1 item 12) to determine other force control values and assign the values to specific locations of the memory unit (column 7 lines 48 - 67 and column 8 lines 1 - 14).

Response to Arguments

3. Applicant's arguments filed December 18, 2006 have been fully considered but they are not persuasive.

Applicant argues that the references of Miura (5994858) and Bernard et al (6799140) do not disclose a physical user interface manipulable by a user through a corresponding physical

setting range having a first end, a second end and at least one specific intermediate position between the first end and the second end. Examiner takes Applicants arguments in full consideration.

The rejection is based on the claims as current presented where a physical user interface manipulable (setting control) by a user through a corresponding a physical setting range (from the user). Based on the claims as presented Miura establishes all the limitation of the claims with regards to initiating a learning mode/user switch operating a motor, measuring at least one parameter that corresponds to the operation of the motor to provide a parameter value using the parameter value to establish a specific force control value to establish obstacle detection or reversing operation or stoppage or other types of operation. Further, assigning specific force control value to a specific location of the set memory unit). It is agreed that the reference of Miura does not disclose using a physical setting range for the force control by using a measured parameter. However, Bernard uses a user manipulability/program module or operator conversion means physical setting range for the force control from measuring at least one parameter and using the parameter value to establish specific force control values. Bernard's operating range is selected by an operator from a plurality of predefined ranges within the microcontroller through a conversational means (consisting of a push button) where the operator selects the ranges through physical contact. As expressed by the Applicant, the push button itself has only two positions (open and closed). The push button therefore is not a physical user interface manipulable by a user through a corresponding physical setting range having a first and second end. However, based on the claims as presented the push button used by the operator is physically setting ranges.

Art Unit: 2837

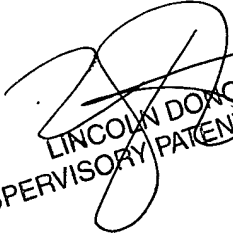
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W. Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan, can be reached on 571-272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tyrone Smith
Patent Examiner

Art Unit 2837


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER